

the signal processing apparatus according to claim 71, which is electrically connected to the image pick-up unit and performs signal processing for said image pick-up signal as a measurement signal; and

<sup>B1</sup>  
<sup>can't</sup> a position calculation unit which is electrically connected to the signal processing apparatus and calculates said position of said mark on the basis of a signal processing result obtained by said signal processing apparatus.

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<sup>105</sup>  
~~107~~. (Amended) An exposure apparatus for transferring a predetermined pattern onto a substrate, comprising:

an outer shape specifying unit including the image processing apparatus according to claim 105, which specifies an outer shape of said substrate;

<sup>B0</sup>  
<sup>rule</sup>  
<sup>1.124</sup> a rotational position control unit which is electrically connected to the outer shape specifying unit and controls a rotational position of said substrate on the basis of said outer shape of said substrate which is specified by said image processing apparatus;

a mark detection unit which detects a mark formed on said substrate whose rotational position is controlled by said rotational position control unit; and

a positioning unit which is electrically connected to the mark detection unit and positions said substrate on the basis of a mark detection result obtained by said mark position detection unit,

wherein said predetermined pattern is transferred onto said substrate while said substrate is positioned by said positioning unit.

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#### IN THE DRAWINGS

Approval of the attached substitute drawings is respectfully requested.